



ABSTRACT OF THE DISCLOSURE

A vertical shaft impact crusher having an upright main frame; a hollow shaft journalled within and suspended by an antifriction bearing supported by a flexible supported housing; an impeller attached to said hollow shaft similar to gun lock means. A second frame within said main frame is elevated and lowered hydraulically and supports an annular rock chamber. Power means to rotate said hollow shaft. Hydraulic means to tighten drive belts from power means to shaft and to relax said belts; Hoppers above and below said shaft and impeller. A static tube within said hollow shaft delivers rock into impeller which propels rock at very high speeds; rocks are shattered by impact of rock against rock resulting in a finely crushed product; all crushing is contained within said chamber. Product falls into lower hopper and is conveyed away.